

**Chronic venous leg ulcer care.  
Putting the patient at the heart of leg ulcer care.  
Part 1: Exploring the consultation.**

Julie Green PhD

Queen's Nurse, RCN Professional Nursing Committee member, RCN District Nurse Forum Chair & member of the Association of District Nurse Educators.

Director of Postgraduate Studies, Senior Lecturer.  
Keele University School of Nursing and Midwifery,  
Clinical Education Centre,  
University Hospitals of North Midlands NHS Trust,  
Royal Stoke University Hospital,  
Newcastle Road,  
Stoke-on-Trent.  
ST4 6QG.

Phone: 01782 679605.

Professor Rebecca Jester PhD

Professor of Nursing, Faculty of Education, Health and Wellbeing, Institute of Health, University of Wolverhampton, WV1 1LY.

Professor Robert McKinley PhD

Professor of Education in General Practice, Keele University Medical School, Staffordshire, ST5 5BG.

Alison Pooler PhD

Lecturer, Director of Learning and Teaching, School of Nursing and Midwifery, Keele University, Staffordshire, ST4 6QG.

**Key words:**

Consultation, leg ulcers, wound care, quality of life.

## **Abstract.**

### **Background:**

This study, presented in two publications, explored the lived experiences of patients with leg ulcers to ascertain the impact of the condition on their quality of life. In response to the study findings, a consultation template was developed and has undergone some evaluation.

### **Aim of the study:**

To explore the impact of chronic venous leg ulceration on quality of life. To evidence the need for and development of a new Leg Ulcer Consultation Template.

### **Methods:**

Four study phases were undertaken. Phases 1 and 2, reported here, employed qualitative methods. In phase 1, unstructured interviews were undertaken and revealed several issues that were significant for patients. These issues were incorporated into a checklist, used during a period of non-participant observation of episodes of care, to assess the extent and depth that the issues were addressed during consultations.

### **Results:**

Several themes were identified in phase 1, including the dominance of pain, issues relating to exudate and odour, social isolation and the psychological impact of having a leg ulcer. The phase 2 observations of consultations revealed that many of these significant issues, emphasised as important by participants during their interviews, were not discussed during consultations.

### **Conclusion:**

Findings of phase 1 and 2 revealed that participants had concerns far beyond their actual wound care which, for this sample, were not fully explored during their nurse consultations.

**Conflict of interests:** This study was partially funded by West Midlands Strategic Health Authority (WMSH) PhD funding (2011-2014).

This study is reported in two articles:

Chronic venous leg ulcer care. Putting the patient at the heart of leg ulcer care: Part 1. Exploring the consultation.

and

Chronic venous leg ulcer care. Putting the patient at the heart of leg ulcer care: Part 2. Development and evaluation of the consultation template.

A copy of the template can be accessed at: [www.keele.ac.uk/luct](http://www.keele.ac.uk/luct)

## **Introduction**

Leg ulcers of any or no recorded aetiology are the most common 'type' of wound managed by the National Health Service (NHS) (Guest et al, 2015). Leg ulcers are both financially expensive, with an estimated expenditure of £5.3 billion in a 12-month period (2012-2013), and personally expensive, presenting a considerable impact to the patient's quality of life (QoL) (Guest et al, 2015; Franks et al, 2016).

Extrapolated analysis of The Health Improvement Network (THIN) database (Guest et al, 2015), revealed that in 2012-2013 an estimated 2.2 million patients presented with a wound. Of this total, 730 000 were classified as a leg ulcer, of any or no stated aetiology, and 278 000 were specifically recorded as a chronic venous leg ulcer (CVLU). This total equates to 1.5% of the adult population of the United Kingdom (UK), with prevalence known to increase with age (Nelson & Adderley, 2016; NHS Choices, 2017). CVLUs can be difficult to heal; healing rates as high as 93% within 12 months have been demonstrated (Franks et al, 2016), however, up to 7% are not healed within 5 years and recurrence rates are estimated to be as high as 70% at three months (Finlayson et al, 2015). Despite these rather disheartening statistics, Cullum et al's (2016) study documented that complete wound healing remained the highest priority for the patient.

## **Summary of the literature**

The World Health Organisation (WHO) define QoL as 'a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity'. To date, there have been a number of reviews that have explored the literature that pertains to the impact of CVLU on the patient's QoL (Herber et al, 2007; Palfreyman et al, 2007; SIGN, 2010; Green et al, 2014). In addition, for this article, a review of studies since 2014 has been undertaken.

Both qualitative, quantitative and mixed methods studies have aimed to establish the specific impact that having a CVLU has on a patient's QoL (Salome et al, 2013; Akesson et al, 2014; de Almeida et al, 2014; Green et al, 2014; Hopman et al, 2014; Szewczyk et al, 2015; Miertova et al, 2016; Cunha et al, 2017; Lernevall et al, 2017). In addition to the published reviews, the more recent studies all corroborate the negative effect of CVLU on both QoL and well-being. Indeed, studies evidence the impact across all spheres of a patient's life including their psychological, emotional, physical, social and financial functioning. Moreover, Lernevall et al (2017, p. 15), in a recent study on the impact of all ulcer types, concluded that 'life with a leg ulcer' was 'a life in hell' due to constant pain, feelings of despair and the impact that having an ulcer has on everyday life. Ultimately, Lernevall et al's study (2017) reported that, for some of their participants, they would rather die than continue a life compromised by CVLUs.

The chronicity of ulceration was captured by Miertova et al (2016), in their cross-sectional study based in Slovakia, where the lowest assessment scores for QoL were attributed to the impact of the ulcer on everyday life, exacerbated by the non-healing nature of the condition, the associated care and the impact on finances. Cunha et al (2017) also demonstrated the impact of CVLU on finances, with participants reflecting that they had been forced to quit their jobs or to retire due to their condition; thus, extending the impact of CVLU to also include a professional impact, directly diminishing the status of the patient in society. Hopman et al (2014) applied a range of tools including the SF12 (Ware et al, 1996) and concluded that QoL was diminished by pain, poor mobility and the impact of the ulcer on sleep. In addition, Hopman et al (2014)

established that the chronic and recurring nature of the condition directly affected the mood of the patient, with depression a common comorbidity.

Studies applying a range of methods, across a number of countries, have consistently demonstrated that the impact of CVLU is under-recognised but that it is an extremely debilitating condition, often characterised by extended periods of ulceration (Lernevall et al, 2017). Self-imposed social isolation was widespread, further reducing QoL (Vishwanath, 2014; Szewczyk et al, 2015). Studies reported the impact of CVLU on all aspects of daily living, with pain dominating the lives of many (Miertova et al, 2016), limiting sleep (Akesson et al, 2014; Hopman et al, 2014) which further debilitated study participants. Exudate and malodour caused embarrassment, low mood, depression and poor self-esteem (de Almeida et al, 2014; Cunha et al, 2017). The ability of participants to maintain adequate standards of personal hygiene was restricted, as was choices of clothes and shoes (Cunha et al, 2017; Szewczyk et al, 2017).

Studies by Salome et al (2013), Vishwanath (2014) and Szewczyk et al (2015) all emphasise a need for health professionals to attempt to determine the QoL of their patients with CVLU due to a global reduction in QoL, exacerbated by changed appearance and its impact on self-perception. Vishwanath (2014) demonstrated that both functional disability and emotional distress, with loss of power and helplessness, were common in this patient group. Similarly, Szewczyk et al's study (2015) evidenced the presence of emotions such as shame, embarrassment, anxiety, worry, anger, loneliness, depression and low mood. Kouris et al's (2016) quantitative study supported these findings and further demonstrated an increase in anxiety for CVLU patients compared to their peers and asserted that health professionals often failed to recognise issues such as poor self-esteem and anxiety in their routine consultations.

All study findings supported the notion that CVLU effectively fits the criteria of a 'long-term condition', as defined by The King's Fund (2018), 'long-term conditions or chronic diseases are conditions for which there is currently no cure, and which are managed with drugs and other treatment'. With sustained healing unlikely for some with CVLU, there are long-term limitations to patient functioning which need to be effectively managed.

## **Research methods**

As summarised above, a range of studies and reviews have been undertaken to establish the effects of CVLU on QoL. For the purposes of this study, it was also important to confirm and establish the impact of leg ulceration for the specific participants of this study. Phases 1 and 2 of the study applied qualitative methods, unstructured interviews and non-participant observation, to enable the researcher to fully explore the lived experience of patients with CVLU. Data was 'followed up' within a consistent sample across phases 1 and 2, thus allowing the researcher to map interview data against observation data. This design facilitated the exploration of whether those issues disclosed at interview were subsequently examined during consultations, for the same sample.

## **Phase One**

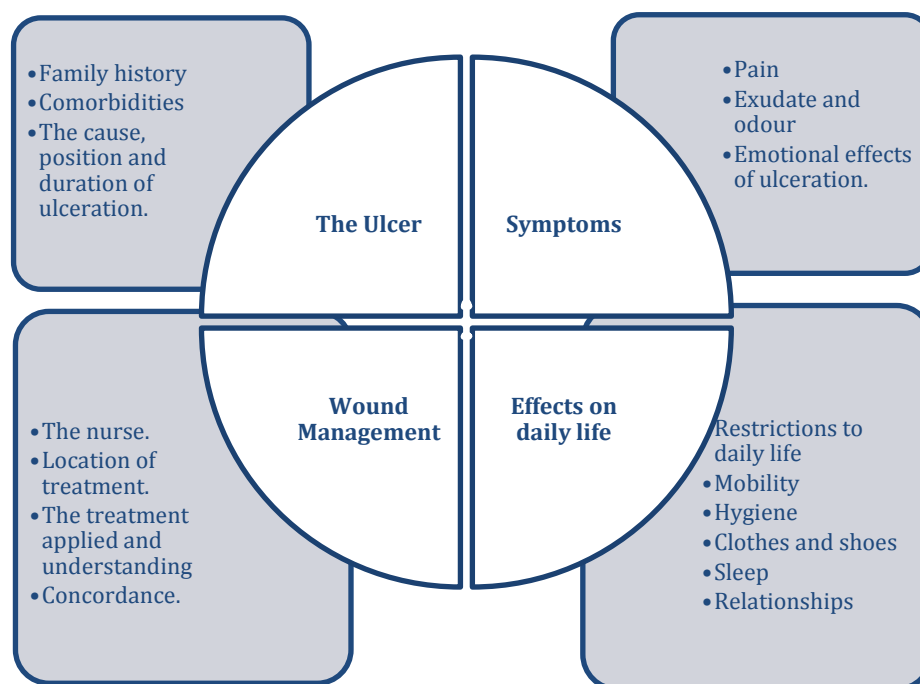
Sampling for phase 1 and 2 adopted a two-stage approach where, initially, a team of District Nurses (DNs) were recruited from two local primary care trusts (PCTs); all were required to be experienced in the care of patients with CVLUs. The consenting DNs then purposively approached potential patient participants for the study from within

their caseload; this approach was adopted to protect the confidentiality of patient participants, with the DNs being responsible for distributing study information and consent forms. Inclusion criteria for patient participants included having a CVLU of either venous or mixed aetiology for more than 6 weeks and the ability of the participant to consent to take part.

Thirteen DNs were recruited into the study; all were female and had worked in primary care for a median of 5 years (range: 6 months to 20 years). Nine patient participants took part in phase 1; 5 were female, 4 males; 2 lived alone, 4 with a partner and 3 lived in residential care. Participants had a mean age of 75 years (range 39–99 years). Participants are identified by pseudonyms (NMC, 2015).

During phase 1, unstructured interviews were undertaken with the patient participants. The nurse participants were simply a ‘gatekeeper’ to accessing suitable patients. Interviews commenced with a single open-ended question: “What is your experience of leg ulceration?” Interviews continued until data saturation; since data analysis was concurrent, when no new themes were emerging during analysis, interviewing was deemed to be complete (Guest et al, 2006). Interviews were audio recorded, transcribed verbatim and analysed thematically (Braun & Clark, 2006). Data was analysed independently by two researchers to ensure the transparency of the analysis. This analysis (Braun & Clark, 2006) identified four core themes within the interview data: the ulcer, symptoms, wound management and the effects on daily life, with each theme encompassing several subthemes; outlined in Figure 1. As demonstrated in the literature summary, evidence of the impact of ulceration on QoL is relatively well established in the research; for the purpose of this study, phase 1 sought to confirm the specific areas of impact for these study participants.

**Figure 1 – Themes and subthemes from interviews.**



## **Findings**

### **The ulcer**

All participants were keen to tell their story. Many reflected on their family history, their comorbidities and the cause of their ulceration. Comorbidities were common; with some participants reflecting on the combined impact of their co-existing conditions, whilst for others, their ulcer was described as only a 'minor irritation' in comparison with their other conditions.

Participants spoke of the initial cause and duration of their ulcer; some cited an injury initially causing their ulcer development whilst, for others, they reflected that their ulcer had simply 'appeared', without any warning. Some reflected on occupational and familial factors that, they felt, had predisposed their ulcer development. Some disclosed that they had initially self-managed their wound, but had eventually resigned themselves to accepting help from a professional, a situation often triggered by the wound deteriorating or an infection developing. One participant reflected that he would avoid 'professionals' being involved in his wound care at times, becoming 'non-compliant' when the condition of his wound would simply overwhelm him.

Most participants had experienced healing, although not all. One participant reflected that his ulcer was taking 'years to heal' and was a significant personal challenge for him. For all participants, healing was slow, and where healing had occurred, participants spoke of the feeling of a sheer frustration when their ulcer had recurred.

The narratives from the interviews exposed a range of consistent and unsolicited themes which provided a rich insight into the person behind the ulcer, the scale of the impact and the background to the very personal journey experienced.

### **Symptoms**

A range of debilitating symptoms were disclosed by the patient participants, which provided three distinct subthemes; pain, exudate and odour and wound management.

#### **Pain**

Pain was reported by all nine participants and formed the very core of each interview. Pain dominated the participant's life and limited their functioning. Across the participants, there were similarities in the description of their pain, including its unceasing nature, severity and timing; pain was reported to be especially problematic throughout the night. Many spoke of long nights, of being awakened by pain in the early hours of the morning and being unable to get comfortable and to go back to sleep again. All spoke of their reluctance to take analgesia, often due to the cocktail of medications they required for their other comorbidities. Where analgesia was taken by participants, respondents reflected that these were generally ineffective for the type and intensity of pain that their leg ulcers caused.

#### **Exudate and odour**

The impact of participants' experiences of exudate and odour were described in detail and included reflections of the devastating challenge that these symptoms posed to daily lives. These overwhelming symptoms were common and caused participants significant embarrassment, shame and stress.

Steve, a young ex-intravenous drug user, disclosed an embarrassing experience of

travelling on a bus, when he noticed fellow passengers gradually moving away from him during the journey; with sadness, he reflected that they had laughed, and were talking and pointing at him. He acknowledged that his legs were particularly offensive that day and reflected that;

*'...it was a really offensive smell.....it was like rotting flesh.....it was horrible.'* Steve

A number of participants reflected that to 'control' the impact of their odour and exudate, they had consciously decided to limit social contact, resulting in an almost 'self-imposed' social isolation. Participants reflected that this 'isolation' was preferable to the embarrassment that their symptoms caused. Ellen, a participant who lived in a residential home, spoke of attending a 'bingo' game organised by the staff at the home. Suddenly, during the game, a fellow resident commented on an 'awful' smell, suggesting it might be due to rotting food. Ellen said that she knew that the smell her fellow resident was referring to was from her bandages, due to her wound exudate; she sadly reflected that she had returned to her room and had vowed never to attend any group events again.

### **Emotional effects of ulceration**

All participants reflected on the emotional impact of their CVLUs which ranged from depression, poor self-image and a fear of people's reactions to their ulcers. Participants disclosed a range of coping strategies that they adopted; some spoke of striving to maintain 'normal' functioning, despite their feelings, whereas others described suffering from severe anxiety, depression and of being unable to function. One respondent divulged that he had previously experienced suicidal thoughts when his ulcers were in their worst condition.

*'...it's just depressing really.....it's either that, or kill myself.....'* Steve

This young participant reflected on the years that he had 'suffered' from ulcers, which fully exposed the overwhelming impact the condition had on all areas of his life.

In contrast to Steve's experiences, an elderly lady, described trying to 'rise above' the devastating impact of her ulcers and trying to continue to undertake her daily activities as she had before having an ulcer:

*'You have to shake yourself....shake your feathers and when you go out you have to put your outside face on.....'* Margaret

These contrasting examples demonstrate comparable experiences of the devastating emotional impact of CVLU, but also present the range of strategies employed by the participants to manage the impact.

Despite the significant negative psychological impact of CVLU, the theme of hope was evident throughout the interviews; hope for healing of their current episode of ulceration. Participants also spoke of looking forward to a time when they would, one day, be 'ulcer free'. Even Steve, who had experienced an unrelenting 14 years of ulceration, spoke of the hope for healing and a future where he could appreciate the simple things we often take for granted, like paddling in the sea!

### **Wound management**

All of the participants described the process of 'managing' their wound, which exposed the prominence that the process of wound care held in their lives. The importance of the

nurse in their personal leg ulcer journey was central to the interviews. Interestingly, in direct contrast to the many changes experienced in community healthcare delivery, participants all stated that they preferred to 'know' the nurse that visited. Tom, an elderly gentleman, summarised this clearly;

*'..with the consistency of a team...much better. They did once send another from another surgery.....it wasn't the same....when you're seeing someone only once....it isn't the same....nothing wrong with her...did the job just the same....fine...but I wasn't used to her...'*

For all, the relationship with their nurses was special; some even described the nurses as their friends, with a close bond formed over the course of many visits. All participants described that the healing of their ulcer was the goal for their nursing teams; however, many participants spoke of accepting that this was often an elusive goal and, when achieved, it would be difficult to maintain.

Some participants had elected to attend a wound care clinic for their dressings, whilst others received care at home. A few participants mentioned 'time wasted', whilst they waited for the nurse to visit at home; indeed, one gentleman, who lived in a residential home, reflected that he had missed out on activities that had been organised by the home because he was left in his room 'waiting for the nurse'. The decision to attend clinic, had, some reflected, enhanced their control about the timing of their care but was also seen as a positive move to get out and about.

## **Effects on daily life**

Several subthemes referred to the effects of ulceration on the participant's daily life.

### **Restrictions to daily life**

Participants reflected on 'staying at home'. Some reflected that they were 'staying at home' more due to their ulceration, stating that this was because their usual activities had become more challenging. Others 'stayed at home' as a conscious decision to limit their contact with others, due to embarrassment or shame or, for one, to avoid any further injury. For whatever reason, participants reflected that they felt that their normal, daily life was 'interrupted', or put on hold, because of their ulceration. Margaret disclosed that:

*'.....I'm frightened in the supermarket....I am frightened when I'm out....so it means that you're on your guard all the time.....'*

In contrast, some participants spoke of 'rising to the challenge' and, with determination, they reflected that they went out despite their ulceration. This, it seemed, was an attempt to fight back and assert control against the limitations their ulcer imposed on functioning.

### **Mobility**

Most of the participants described difficulties walking since their ulcer; some attributed these difficulties to wound discomfort, whilst others felt that the limitations were due, at least in part, to their dressing. Many spoke of limiting how far they walked, due to discomfort, but also, because they feared that they might fall. Some described adapting their own footwear to accommodate their dressing, whilst others spoke of being 'prescribed' special footwear; all felt that either approach served to limit the safety of



walking and potentially increase their risk of falling, causing further damage or another wound.

### **Personal hygiene**

The maintenance of personal hygiene challenged all participants, most often due to the dressing. Some spoke of being supplied with a new shower appliance, which had allowed them to shower whilst protecting their bandage. Some voiced concerns about their safety whilst wearing a shower-aid, with participants worried that they might fall in the shower and sustain further injuries. Other participants stated that they would really appreciate their legs being washed during their clinical visit from the nurse for their dressing change. One respondent described how upset she was that her legs were not washed during these nurse visits, stating that the bandage was simply removed and the next bandage immediately applied.

### **Limited choices for clothes and shoes**

Challenges when selecting appropriate clothes and shoes were raised by all participants and were most often attributed to the sheer bulk of the dressings that they required. Indeed, some participants spoke having to buy much bigger shoes. Indeed, one lady reflected that she now needed size 10's shoes and had to resign herself to selecting men's shoes, as there were not women's shoes available in a suitable size. One spoke of wanting to select clothes that would conceal her dressings, as she felt ashamed of her bandages. Margaret explained;

*'....it's horrible....you can't dress as you want to.....'*

### **Sleep**

Sleep was an issue for all participants and was most often due to pain. One participant commented that night times were particularly difficult and they actually dreaded going to bed. Margaret said;

*'Some nights.....I had no sleep with it all night.....'*

The severe lack of sleep appeared to accentuate the debilitating nature of the condition, exacerbating symptoms and making day to day functioning all the more challenging.

### **Relationships**

Participants described the impact their CVLUs had on their relationships. One gentleman reflected that he now required family members to assist him with activities, whereas prior to his ulcer he had been quite independent. For another, a carer, he said that he had sadly now become 'cared for'. One participant described his inability to provide the level of care for his wife that he previously had done, prior to his ulcer. He spoke of accompanying her to complete the supermarket shopping as she was partially sighted whereas now, he described how he would:

*'....have to sit down and my wife would struggle round.....'* Sam

Day to day living, with a CVLU, for all participants had become a challenge and their leg ulceration impacted on every aspect of their day to day life.

The phase 1 interviews effectively demonstrated the lived experience of the participants as they battle with their leg ulceration on a day to day basis. It was clear that, for all, their quality of life was diminished in every area of functioning, as found in

the literature. Simple tasks had become a challenge and family dynamics altered by the condition.

## Phase 2

As mentioned, the DN and patient participants were consistent across phase 1 and 2, in order to allow for the 'follow up' of a consistent sample across the phases. Nine participants were recruited in phase 1, however, unfortunately, only five participants were available for recruitment in phase 2 (three males, 2 female; median age: 76 years; range: 39–86 years). This was for a range of reasons: for two, their ulcer had healed, one was in hospital following a fall and one had been discharged from the caseload.

Consecutive wound care consultations for each of the 5 remaining participants were observed, each on four occasions; thus providing 20 observation opportunities in total (approximately 10 hours of observation in total). Observations aimed to determine the extent to which the themes that were disclosed in phase 1, were explored by the nurse during a routine consultation. The researcher took a non-participant observer role, analysis was concurrent and aimed to establish the proportion of occasions that the themes raised in phase 1 were subsequently explored and addressed during the consultation.

A checklist was developed based on the phase 1 data analysis and contained 28-items. For each participant, the checklist was completed during each of their consultations. For ease of completion, the checklist included tick, comment and 'scoring' boxes to minimise any distraction for the researcher. A 'scoring' scale based on those used in similar studies (Ebbeskog & Ekman, 2001), facilitated a rapid assessment and recording of the depth of exploration of each theme (Table 1).

**Table 1 - Scores for checklist themes.**

Score	Criterion
0	Theme not raised by nurse or patient.
1	Nurse did not identify cue from patient.
2	Nurse picked up cue only.
3	Nurse identified patient cue and asked about the issue.
4	Nurse picked up cue and partially dealt with it.
5	Nurse picked up cue and dealt with it fully.

A score of 0 was allocated to the theme if it was not raised during the consultation; a score of 1 if the patient mentioned the issue but the nurse failed to notice their cue; a score of 2 if the nurse acknowledged a cue from the patient but failed to explore this any further. A score of 3 was attributed if there was some discussion around an issue but no solutions offered. Finally, a score of 4 or 5 was attributed if a partial (4) or complete (5) solution was offered

Over a period of 4 weeks, the five patient participants consulted a total of 20 times with 13 different nurse participants. For each of the themes, the responses are recorded below in both number of occasions and percentage (Table 2).

**Table 2 –Observation results.**

Issue (total number of potential occurrences of each issue)	Number (%) of known issues were raised by patients to and responded to by nurses.					
	Not raised (score = 0)	Cue not identified (score = 1)	Cue blocked (score = 2)	Discussed (score = 3)	Partially dealt with (score = 4)	Fully dealt with (score = 5)
<b>Pain (132)</b>	55 (42%)	9 (7%)	1 (1%)	36 (27%)	9 (7%)	22 (16%)
<b>Exudate &amp; odour (28)</b>	9 (32%)	1 (4%)	1 (4%)	5 (18%)	1 (4%)	11 (38%)
<b>Emotional effects (28)</b>	16 (56%)	2 (7%)	1 (4%)	8 (29%)	0 (0%)	1 (4%)
<b>Wound management (32)</b>	3 (9%)	0 (0%)	1 (3%)	9 (28%)	4 (13%)	15 (47%)
<b>Effects on daily life (84)</b>	32 (38%)	8 (10%)	1 (1%)	33 (39%)	3 (4%)	7 (8%)
<b>Total (304)</b>	<b>115 (38%)</b>	<b>20 (7%)</b>	<b>5 (1%)</b>	<b>91 (30%)</b>	<b>17 (6%)</b>	<b>56 (18%)</b>

## Findings

The nurses that were observed in phase 2 were competent and experienced in wound care. Observations took place on both home visits and in a clinic environment. Despite the study being undertaken across busy caseloads, the observed consultations were delivered in a supportive, unhurried and proficient manner. Indeed, almost 10 hours of consultations were observed for the purposes of phase 2 analysis.

To summarise the findings displayed in table 2; the final ‘total’ row demonstrates that 38% of concerns, that had previously been disclosed, without prompting, at interview, were not raised by either the patient or their nurse during the consultation. Of the 62% of concerns that were raised by the patient, 8% were either overlooked or not explored by the nurse and 30% were ‘discussed’, however a solution was not offered. The remaining 24% of issues were either partially managed (6%) or completely managed (18%).

Closer inspection of the data reveals that certain themes were explored less frequently than others. Indeed, the emotional impact of having a CVLU was completely overlooked, not raised by either the patient or their nurse, on 56% of occasions. Here, a partial or complete solution was only offered on 4% of occasions. Similarly, pain, a concern readily raised during the interviews, was not explored on 42% of occasions and a solution was offered on only 23% of occasions. Wound management fared slightly better, in only 9% of cases this was not raised, with a partial or complete solution offered on 60% of occasions. It appeared that wound management issues were more frequently acknowledged and managed, which may have been due to the nature of patient presentation during the consultation. An example would be odour or excessive exudate, since this would be so noticeable during the consultation, this would prompt the nurse to explore the issue.

## **Discussion**

Phase 1 and 2 of this CVLU study were designed to facilitate the 'follow up' of sample data across the phases. This design enabled the researcher to map the interview data against observation data, to facilitate exploration of whether the issues disclosed at interview were explored during consultations, for the same participants.

The rich data collected in phase 1, clearly and effectively demonstrates the detrimental impact of ulcers, and is aligned with the findings evidenced in the earlier literature summary. Physical, psychological and social functioning was diminished, with participants reporting a daily struggle to retain their independence. Interview data of the impact of CVLU in phase 1 was freely disclosed by participants in response to a simple question; "What is your experience of leg ulceration?". Phase 2 revealed that during consultations, some of these key issues were not disclosed or explored, despite being freely discussed in phase 1.

This data has, albeit from a small sample, has potential implications for the effectiveness of nurse-led wound care consultations and clearly highlights that the concerns that impact on our patient's functioning are not effectively shared and, thus, a key opportunity may well be being lost. Most concerning is the lack of disclosure of emotional and psychological issues, which research evidences have a considerable impact on this population (Salome et al, 2013; Akesson et al, 2014; de Almeida et al, 2014; Green et al, 2014; Hopman et al, 2014; Szewczyk et al, 2015; Miertova et al, 2016; Cunha et al, 2017; Lernevall et al, 2017).

The lack of patient disclosure identified and reported here may be due to a number of underlying reasons, however this was not explored within this study. Examples might be that nurses may have previously not responded to a patients' disclosure and, as a result, a patient may have decided not to mention the issue again; the patient may be unsure that the issue is within the nurses' remit, for example increased pain, and may intend to discuss this at a subsequent medical consultation or they may feel that their nurse is too busy or hurried and, should they disclose an issue, this may unduly delay the nurse. Interestingly, research evidence suggests that nurses may actively limit patient interaction and control the consultation by appearing hurried or by discussing how busy they are, serving to discourage and limit patient disclosure (Henderson, 2003). Further research into the dynamics of wound care consultations is required but was beyond the remit of this study.

## **Limitations**

A key limitation of this study is the small sample size in phase 2. Interviewing until saturation (Guest et al, 2006) limited the phase 1 sample size to 9 participants, which is acceptable. Due to a range of factors (ill health, healing, hospital admission), the sample available for phase 2 was limited to 5 participants. Repeated consultations observations for the remaining participants, provided observations of 20 consultations in total (10 hours of data), which went some way to limiting this confounder, however the effect on outcomes cannot be predicted. It is uncertain whether a larger sample size would have impacted the key finding; the identification that patients failed to disclose key issues during their consultations, which, without focussed questioning by the consulting nurse, would otherwise be overlooked.

## **Conclusion**

Phase 1 and 2 study data demonstrate a mismatch between the impact of a concern for the patient and their likelihood of disclosure to their nurse, albeit for a small sample. The study does however, highlight a need for nurses to more effectively explore issues with their patient during their clinical consultations. The impact of CVLU on the QoL of the patient is well documented in the literature; nurses need to ensure this knowledge forms the basis of their discussions whilst consulting. The evidence from this study suggests that nurses need to purposefully prompt patients to disclose the issues that may be impacting on their daily lives, rather than relying on the patient to disclose without such prompting.

Based on this data, Part 2 will report the development of a consultation template, designed to direct the nurse to explore QoL issues during the wound care consultation. An evaluation of the utility and clinical impact of the template will also be presented.

## References:

- Akesson, N., Oien, R., Forssell, H. & Fagerstrom, C. (2014). Ulcer pain in patients with venous leg ulcers related to antibiotic treatment and compression therapy. *Community Wound Care*. September 2014.
- Ashby R, Gabe R, Ali S, Saramago P, Chuang L, Adderley U, Bland JM, Cullum NA, Dumville JC, Iglesias CP, Kang'ombe AR, Soares MO, Stubbs NC, Torgerson DJ (2014) VenUS IV (Venous leg Ulcer Study IV): compression hosiery compared with compression bandaging in the treatment of venous leg ulcers: a randomised controlled trial, mixed treatment comparison and decision-analytic model. *Health Technol Assess*, 18(57):1-293, v-vi. doi: 10.3310/hta18570.
- Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*. 3: 2, 77-101.
- Briggs, M. & Flemming, K. (2007). Living with leg ulceration: a synthesis of qualitative research. *Journal of Advanced Nursing*. 59 (4), 319-328.
- Cullum N, Buckley H, Dumville J et al (2016) Wounds research for patient benefit: a 5-year programme of research. *Programme Grants Appl Res* 4(13).
- Cunha, N., Campos, S. & Cabete, J. (2017). Chronic leg ulcers disrupt patients' lives: A study of leg ulcer-related life changes and quality of life. *Community Wound Care*. September 2017.
- de Almeida, W., Ferreira, A., Ivo, M., Rigotti, M., Goncalves, R. & Pelegrini dos Santos Pereira, A. (2014). Socio-demographic and clinical characteristics and quality of life of people with wounds: an integrative review. *Journal of Nursing UFPE On Line*. 8 (12), 4353-4361.
- Ebbeskog, B & Ekman, S. (2001a). Elderly people's experiences: the meaning of living with venous leg ulcer. *European Wound Management Association Journal*. 1 (1), 21-23.
- Finlayson, K., Wu, ML., Edwards, HE. Identifying risk factors and protective factors for venous leg ulcer recurrence using a theoretical approach: A longitudinal study. *Int J Nurs Stud* 2015; 52: 6,1042-1045.
- Franks, P. & Moffatt, C. (2007). Leg Ulcers in Smith and Nephew Foundation *Skin Breakdown – The silent epidemic*. UK, snfoundation.
- Franks P, Barker J, Collier M, Gethin G, Haesler E, Jawien A, Laeuchli S, Mosti G, Probst S, Weller C (2016) Management of patients with venous leg ulcer: challenges and current best practice. *Journal of Wound Care* 25(6 Suppl 1):1-67.
- Green J, Jester R, McKinley R & Pooler A. (2013a) Patient perspectives of their leg ulcer journey. *Journal of Wound Care*. 22, 2.
- Green, J., Jester, R., McKinley, R. & Pooler, A. (2013b). Nurse-patient consultations in primary care: do patients disclose their concerns? *Journal of Wound Care*. 22 (10), 534-539.

- Green, J., McKinley, R., Jester, R. & Pooler, A. (2014). The impact of chronic venous leg ulcers: a systematic review. *Journal of Wound Care*. 23 (12), 601-612.
- Green, J., McKinley, R., Jester, R. & Pooler, A. (2015). A new quality of life consultation template for patients with venous leg ulceration. *Journal of Wound Care*. 24 (3), 140-148.
- Guest, G., Bunce, A. & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*. 18 (1), 59–82.
- Guest, J. F., Ayoub, N., McIlwraith, T., Uchegbu, I., Gerrish, A., Weidlich, D., Vowden, K. & Vowden, P. (2015). Health Economic burden that wounds impose n the National Health Service in the UK. *BMJ Open*, 5: e009283. doi:10.1136/ bmjopen-2015-009283
- Harding, K., Dowsett, C., Fias, L., Jelnes, R., Mosti, G., Oien, R., Partsch, H., Reeder, H., Senet, P., Soriano, J. & Vanscheidt. (2015). Simplifying venous leg ulcer management. Consensus recommendations. *Wounds International*; [www.woundsinternational.com](http://www.woundsinternational.com)
- Henderson, S. (2003). Power imbalance between nurses and patients: a potential inhibitor of partnership in care. *Journal of Clinical Nursing*. 12(4), 501-508.
- Herber, O. R., Schnepf, W. & Rieger, M. A. (2007). A systematic review on the impact of leg ulceration on patients. *Health and Quality of Life Outcomes*. 5, 44-56.
- Hopman, W., VanDenKerkhof, E., Carley, M., Kuhnke, J. & Harrison, M. (2014). Factors associated with health-related quality of life in chronic leg ulceration. *Qual Life res*. 23: 1833-1840.
- King's Fund (2012). *Time to Think Differently*. Accessed at: <https://www.kingsfund.org.uk/projects/time-think-differently/trends-disease-and-disability-long-term-conditions-multi-morbidity> 20/1/18.
- Kouris, A., Christodoulou, C., Efstathiou, V., Tsatovidou, R., Torlidi-Kordera, E., Zouridaki, E. & Kontochristopoulos, G. (2016). Comparative study of quality of life and psychological characteristics in patients with psoriasis and leg ulcers. *Wound Rep Reg*. 24, 443-446.
- Lernevall, L., Fagh, K., Nielsen, C., Dam, W. & Dreyer, P. (2017). Lived experiences of life with a leg ulcer – a life in hell. *EWMA Journal*. 17, 1, 15-21.
- Miertova, M., Dlugosova, K., Ovsonkova, A. & Cap, J. (2016). Chosen aspects of quality of life in patients with venous leg ulcers. *Central European Journal of Nursing and Midwifery*. 7, 4, 527-533.
- Nelson, E. A., Harper, D. R., Prescott, R. J., Gibson, B., Brown, D., & Ruckley, C. V. (2006). Prevention of recurrence of venous ulceration: randomized controlled trial of class 2 and class 3 elastic compression. *Journal of vascular surgery*, 44(4), 803-808.
- Nelson, E. A. & Adderley, U. (2016). Venous leg ulcers. Systematic review 1902. *BMJ Clinical Evidence*. <http://clinicalevidence.bmj.com/x/systematic-review/1902/overview.html>. Accessed 11 November 2017 at 11.58.

NHS Choices (2017). *Venous Leg Ulcer*. Accessed at: <https://www.nhs.uk/conditions/leg-ulcer/> on 14/11/17.

Palfreyman, S., Tod, A., King, B., Tomlinson, D., Brazier, J. & Michaels, J. (2007). Impact of intravenous drug use on quality of life for patients with venous ulcers. *Journal of Advanced Nursing*. 58 (5), 458-467.

Persoon, A., Heinen, M., van der Vleuten, C., de Rooij, M., van de Kerkhof, P. and van Achterberg, T. (2004). Leg Ulcers: a review of their impact on daily life. *Journal of Clinical Nursing*. 13, 341-354.

Rich, A. and McLachlan, L. (2003). How living with a leg ulcer affects people's daily life: a nurse-led study. *Journal of Wound Care*. 12 (2), 51-54.

Salome, G., de Almeida, S., Bueno, M., Dutra, R. & Ferreira, L. (2013). Feelings of powerlessness in patients with venous leg ulcers. *Journal of Wound Care*. 22, 11, 628-634.

Scottish Intercollegiate Guidelines Network (SIGN)120. (2010). *Management of chronic venous leg ulcers. A national clinical guideline*. Edinburgh: Scottish Intercollegiate Guidelines Network.

Szewczkk, M., Moscicka, P., Jawien, A., Cwajda-Biatasik, J, Cierzniakowska, K., Slusarz, R. & Hanke, E. (2015). Quality of life in patients with leg ulcers or skin lesions – a pilot study. *Postepy Dermatologii*. 32, 6, 465-469.

Vishwanath, V. (2014). Quality of life: Venous leg ulcers. *Indian Dermatology Online Journal*. 5, 3, 397-399.

Ware, J.E., Kosinski, M. & Keller, S. (1996). A 12-Item Short-Form Health Survey: Construction of scales and preliminary tests of reliability and validity. *Medical Care*. 34 (3), 220-233.